

CLAIMS:

1. A medical image analysis process which utilizes information contained in at least one medical image, in which a quantitative evaluation is derived from the medical image analysis process and delivered as an output, characterized in that the result of an error analysis, performed in order to provide information relating to the accuracy of the quantitative evaluation, is also delivered as a further output.
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2. A medical image analysis process, as claimed in Claim 1, characterized in that the error analysis comprises steps wherein
an image artefact which contributes to the image analysis process is identified,
10 the influence of the image artefact on the accuracy of the quantitative evaluation is calculated,
the results of the calculation of the influence on the accuracy of the quantitative analysis is incorporated into the delivered further output.
- 15 3. A medical image analysis process, as claimed in Claim 1, characterized in that the error analysis comprises steps wherein
an image processing step which contributes to the image analysis process is identified,
the influence of the image processing step on the accuracy of the quantitative
20 evaluation is calculated,
the results of the calculation of the influence on the accuracy of the quantitative analysis is incorporated into the delivered further output.
- 25 4. A medical image analysis process, as claimed in Claim 2 or Claim 3, characterized in that the results of the calculation of the influence on the accuracy of the quantitative analysis is stored prior to incorporation into the delivered output.

5. A medical image analysis process, as claimed in Claim 4, characterized in that, the results of the calculation of the influence on the accuracy of the quantitative analysis is stored in at least one of a multidimensional table, a look up table, or a formula.
- 5 6. A medical image analysis process, as claimed in Claim 2, characterized in that, the identified image artefact which contributes to the image analysis process is at least one of noise, partial volume effect, sampling rate, inhomogeneity within the medical imaging process or an artefact due to patient motion.
- 10 7. A medical image analysis process, as claimed in Claim 3, characterized in that, the identified image processing step which contributes to the image analysis process is at least one of registration, outlier classification, contour placement or segment placement.
8. A medical image analysis process, as claimed in Claim 1, characterized in that,
15 the medical image analysis process which utilizes information contained in the at least one medical image is the assessment of cardiac perfusion data, and the quantitative evaluation which is derived from the medical image analysis process and delivered as an output is the myocardial perfusion reserve index.
- 20 9. A computer program, comprising instructions for a medical image analysis process which utilizes information contained in at least one medical image, and in which a quantitative evaluation is derived from the medical image analysis process and delivered as an output, characterized in that the computer program further comprises instructions wherein the result of an error analysis, performed in order to provide information relating to the
25 accuracy of the quantitative evaluation, is also delivered as a further output.
10. A workstation, comprising instructions for a medical image analysis process which utilizes information contained in at least one medical image, and in which a quantitative evaluation is derived from the medical image analysis process and delivered as
30 an output, characterized in that the workstation further comprises instructions wherein the result of an error analysis, performed in order to provide information relating to the accuracy of the quantitative evaluation, is also delivered as a further output.